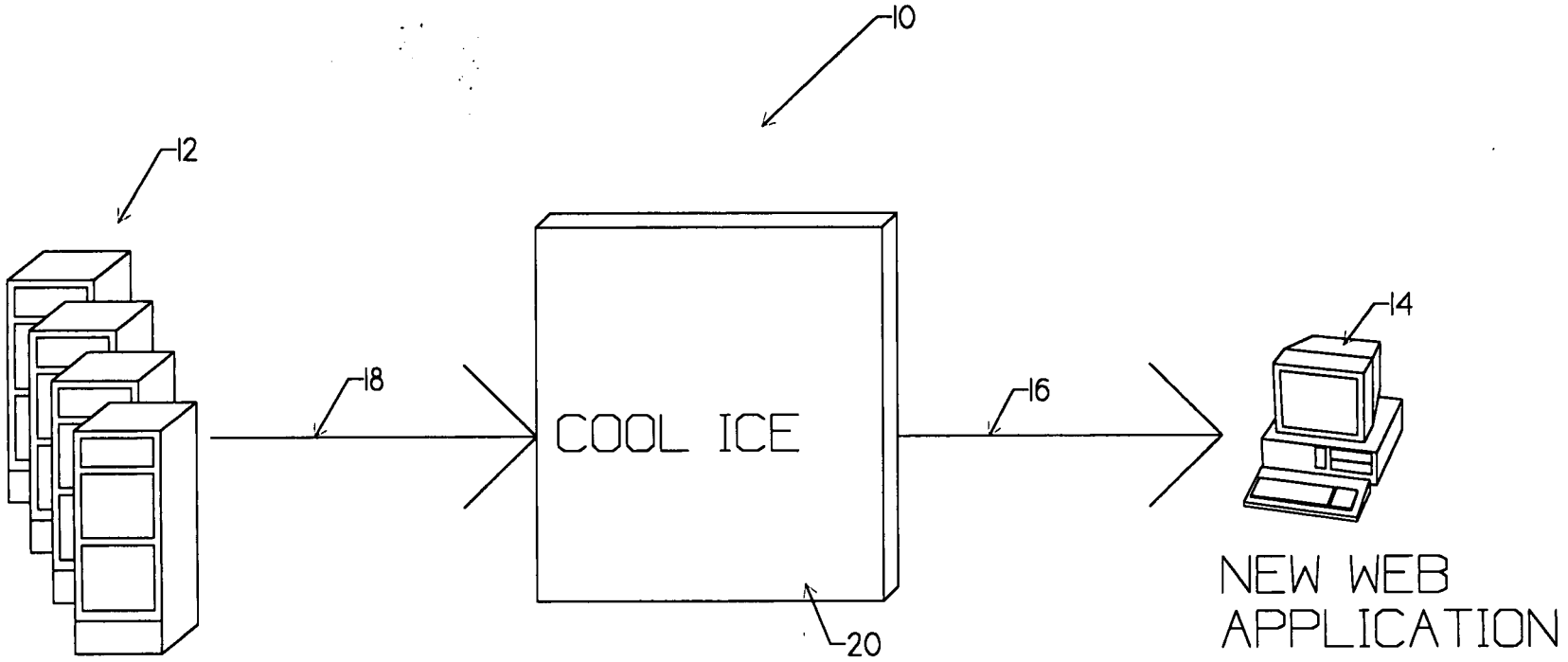

10
12
18
COOL ICE
16
14
20
NEW WEB
APPLICATION
EXISTING
DATABASES AND
APPLICATIONS

FIG. 1

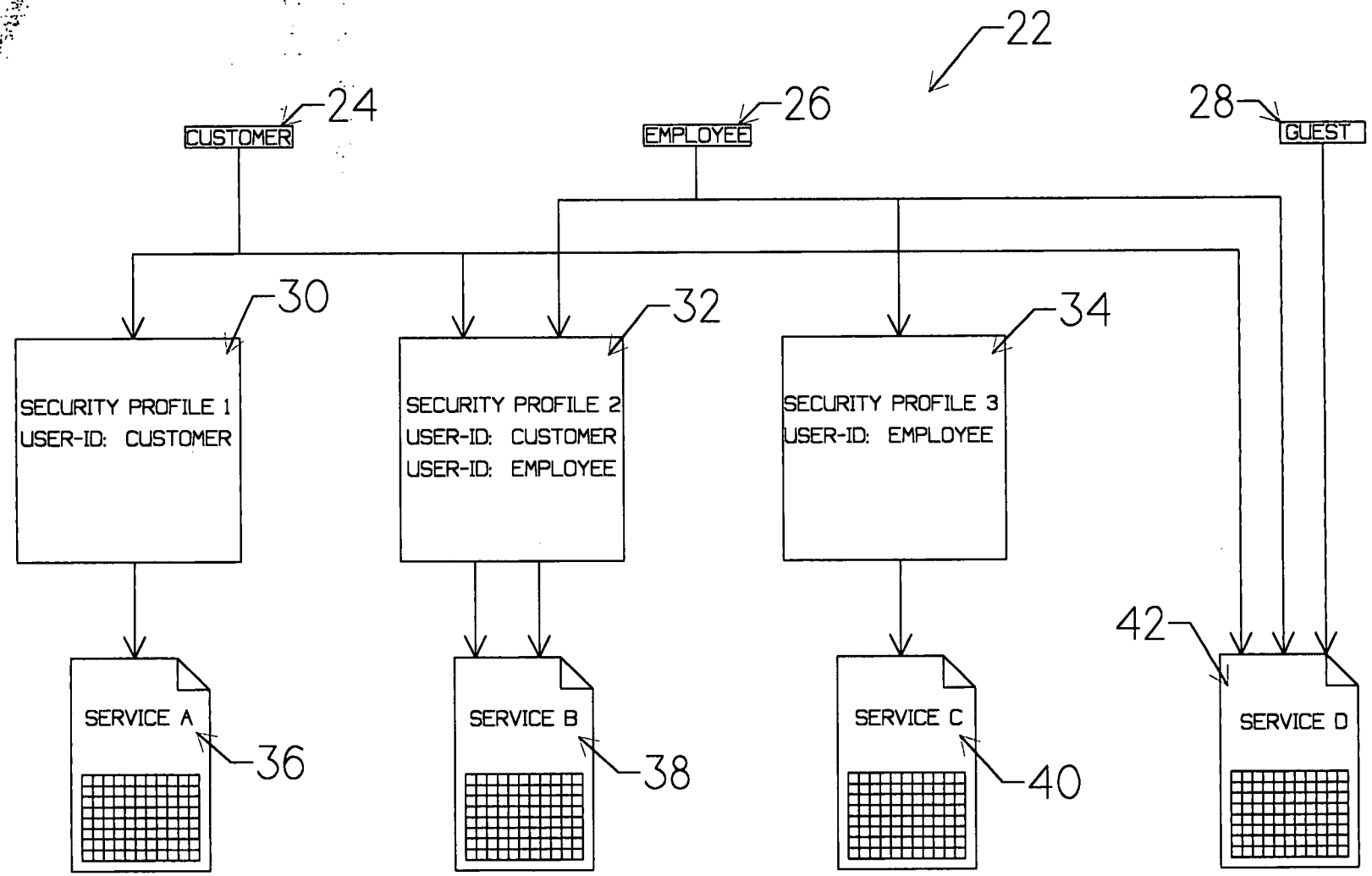

22
CUSTOMER
24
EMPLOYEE
26
GUEST
28
30
32
34
SECURITY PROFILE 1
USER-ID: CUSTOMER
SECURITY PROFILE 2
USER-ID: CUSTOMER
USER-ID: EMPLOYEE
SECURITY PROFILE 3
USER-ID: EMPLOYEE
42
SERVICE A
36
SERVICE B
38
SERVICE C
40
SERVICE D

FIG. 2

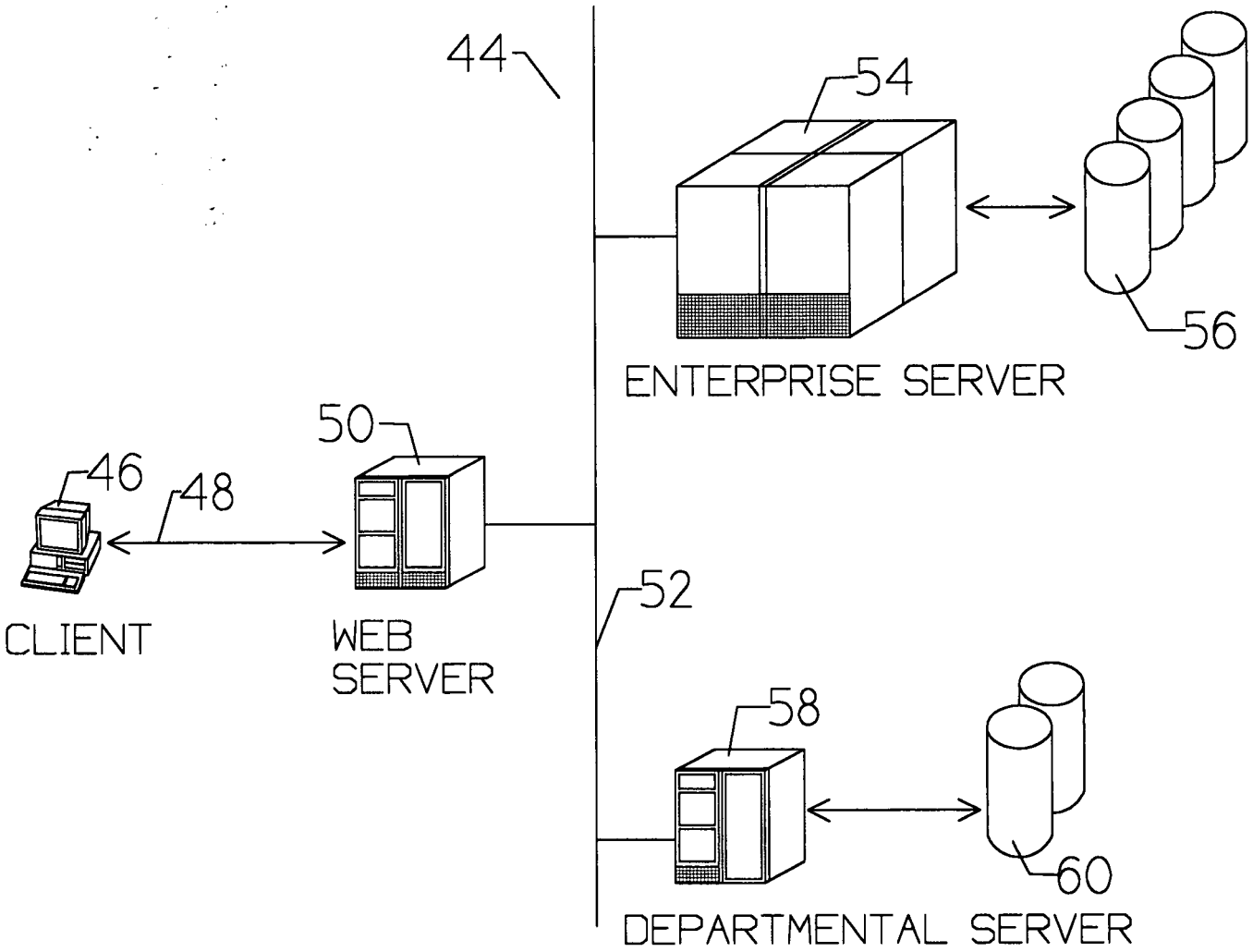

44
54
56
ENTERPRISE SERVER
50
46
48
CLIENT
WEB
SERVER
52
58
60
DEPARTMENTAL SERVER

FIG. 3

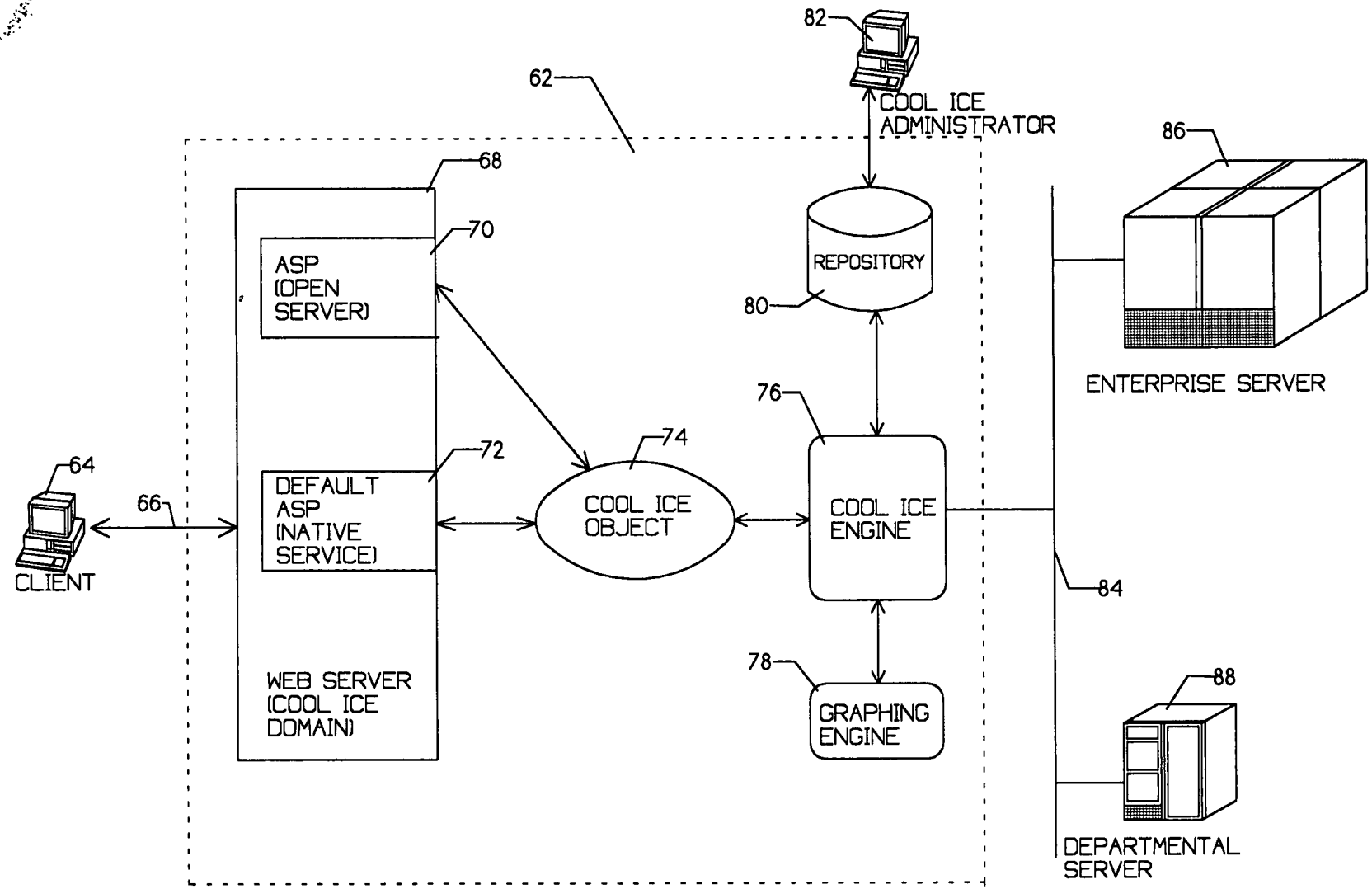

82
62
COOL ICE
ADMINISTRATOR
86
68
70
ASP
(OPEN
SERVER)
REPOSITORY
80
ENTERPRISE SERVER
76
74
72
64
66
DEFAULT
ASP
(NATIVE
SERVICE)
COOL ICE
OBJECT
COOL ICE
ENGINE
CLIENT
84
78
88
WEB SERVER
(COOL ICE
DOMAIN)
GRAPHING
ENGINE
DEPARTMENTAL
SERVER

FIG. 4

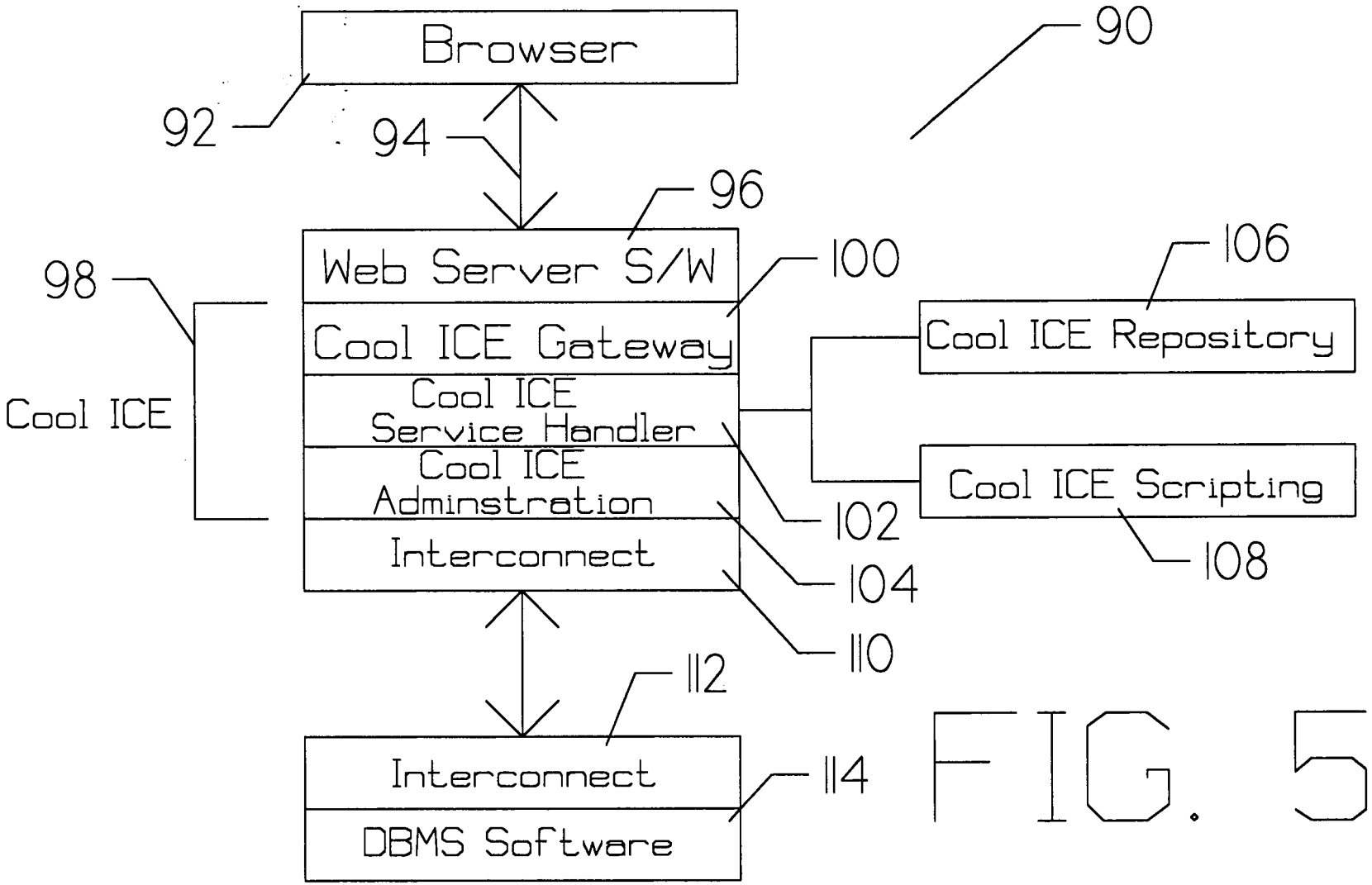

Browser
90
92
94
96
Web Server S/W
98
100
106
Cool ICE Gateway
Cool ICE Repository
Cool ICE
Cool ICE
Service Handler
Cool ICE
Adminstration
Cool ICE Scripting
102
Interconnect
104
108
110
112
Interconnect
114
DBMS Software

FIG. 5

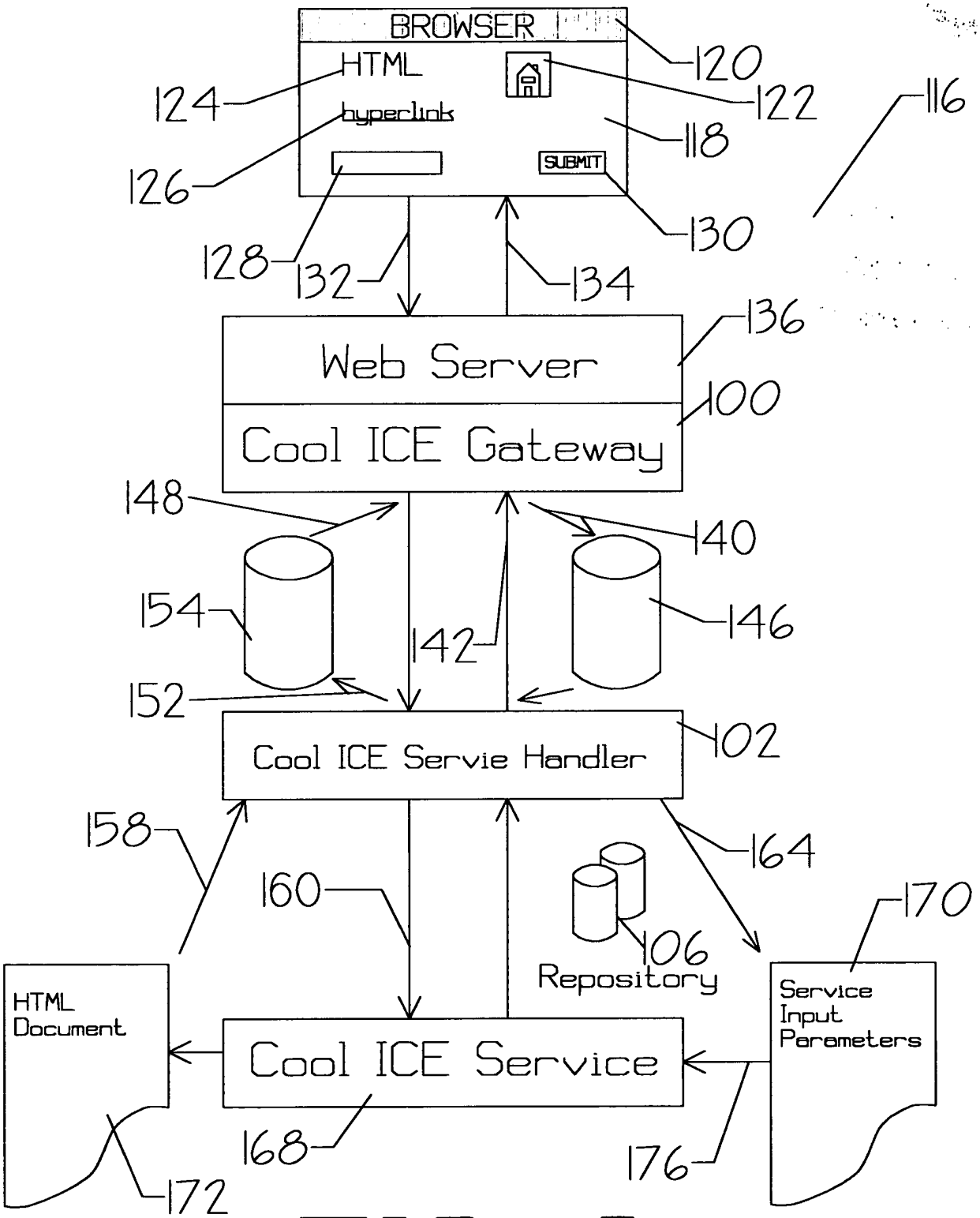

BROWSER
HTML
hyperlink
SUBMIT
120
122
124
126
116
118
128
130
132
134
Web Server
136
Cool ICE Gateway
100
148
140
154
146
142
152
Cool ICE Servie Handler
102
158
164
160
106
Repository
170
HTML
Document
Service
Input
Parameters
Cool ICE Service
168
176
172

FIG. 6

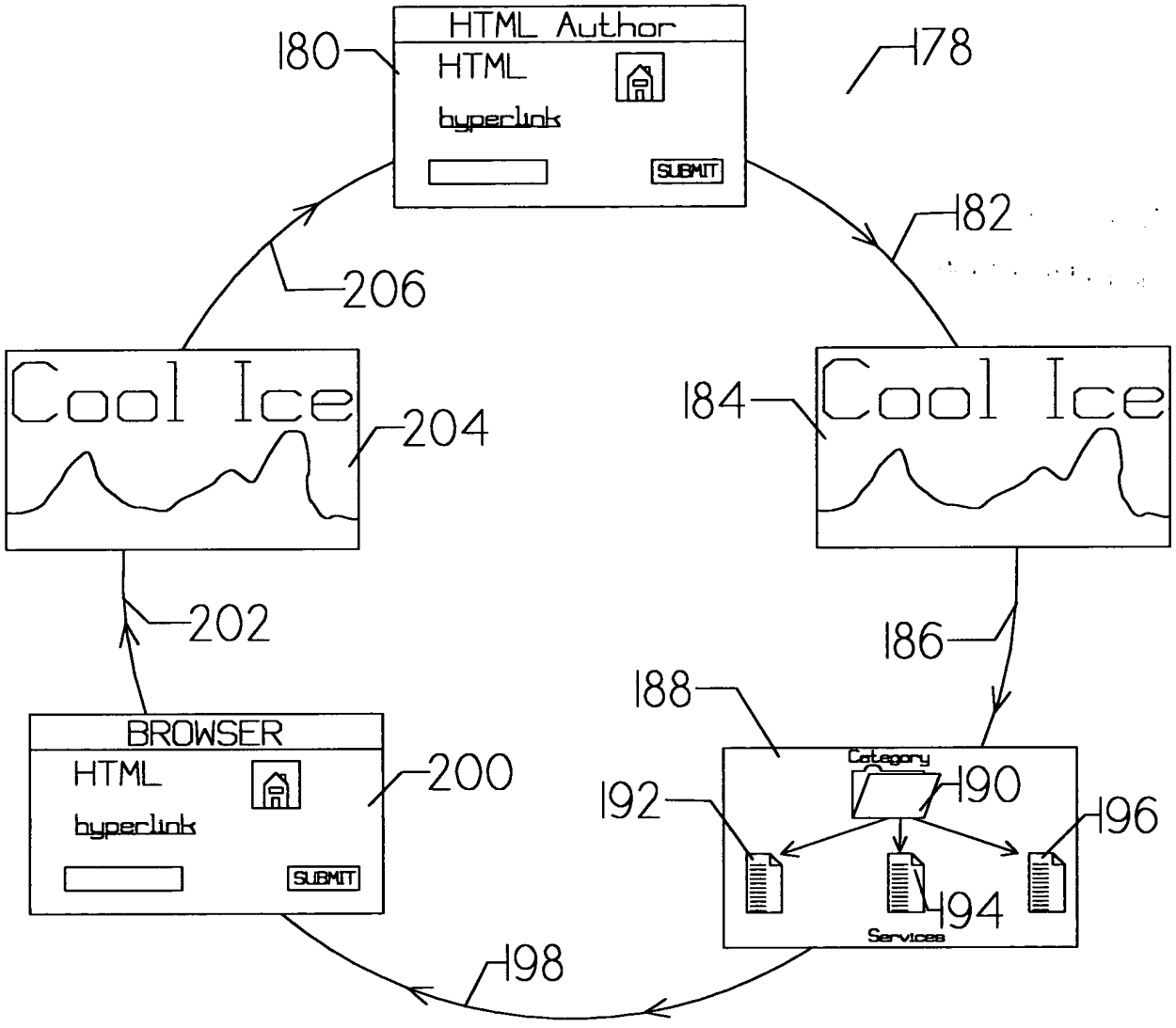

HTML Author
HTML
hyperlink
SUBMIT
180
178
182
206
Cool Ice
204
184
Cool Ice
202
186
188
BROWSER
HTML
hyperlink
SUBMIT
200
Category
190
192
196
194
Services
198

FIG. 7

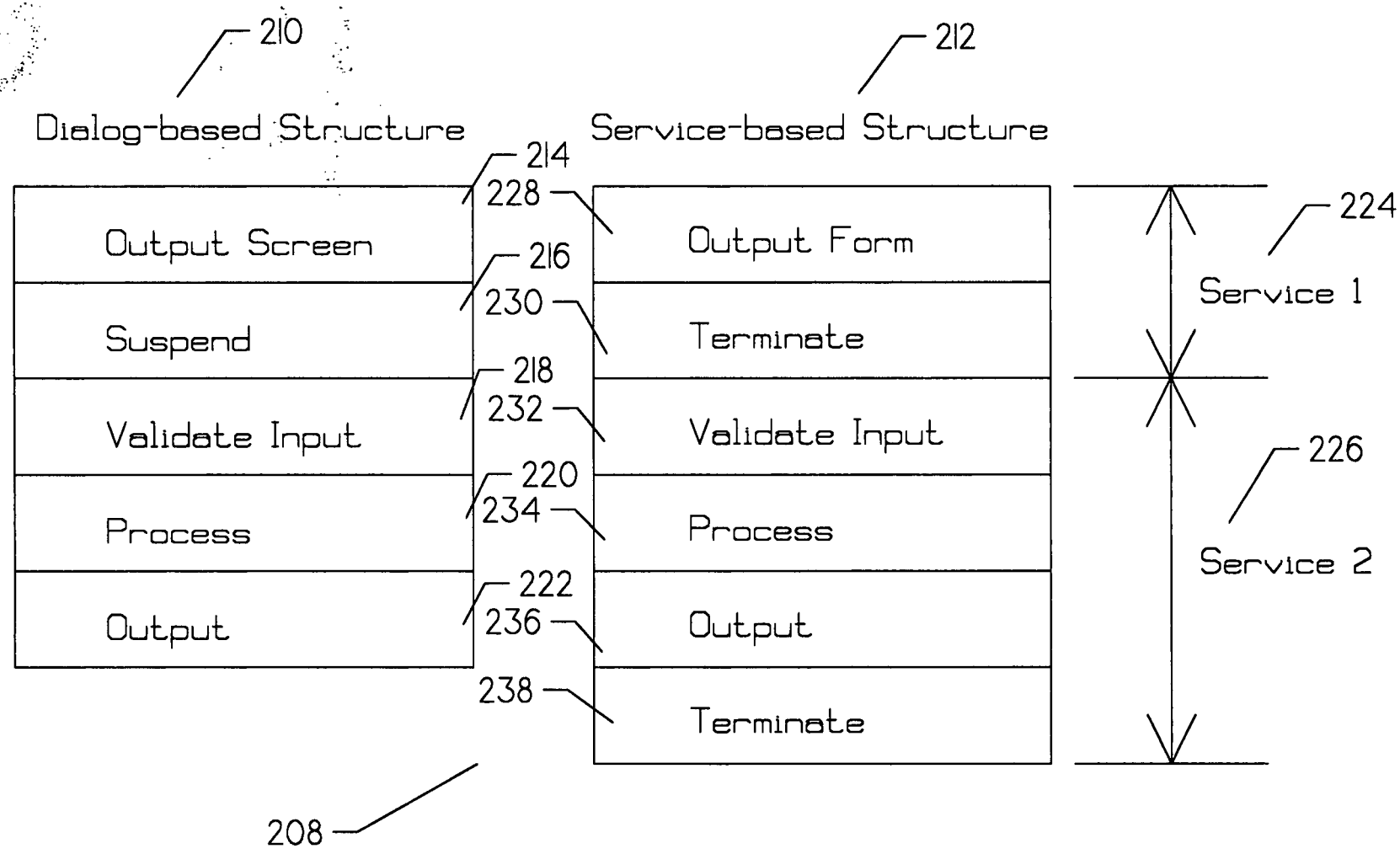

210
Dialog-based Structure
212
Service-based Structure
214
228
216
230
218
232
220
234
222
236
238
Output Screen
Suspend
Validate Input
Process
Output
Output Form
Terminate
Validate Input
Process
Output
Terminate
224
Service 1
226
Service 2
208

FIG. 8

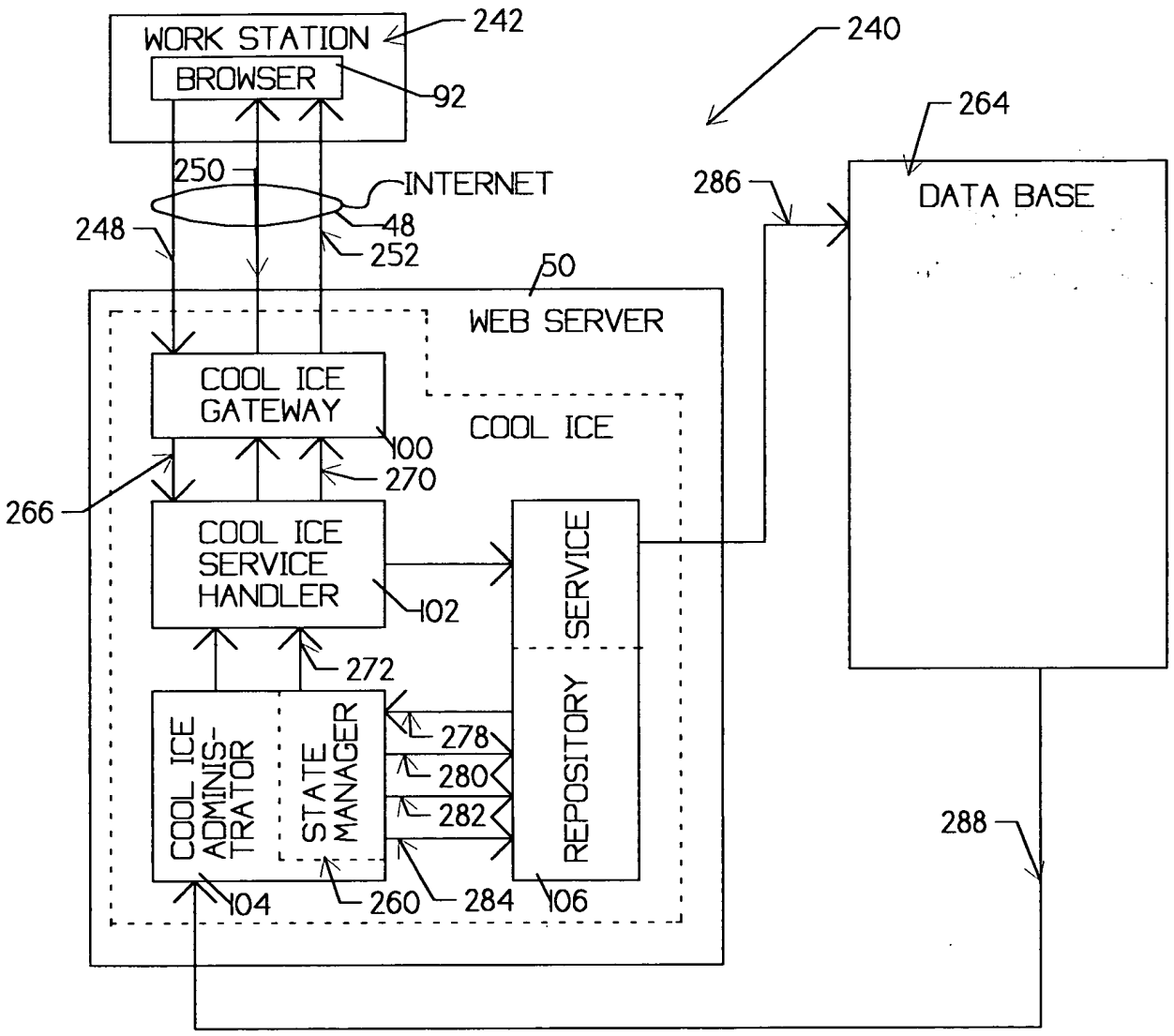

WORK STATION
242
BROWSER
92
240
264
250
INTERNET
286
DATA BASE
248
48
252
50
WEB SERVER
COOL ICE
GATEWAY
COOL ICE
100
270
266
COOL ICE
SERVICE
HANDLER
102
SERVICE
272
COOL ICE
ADMINIS-
TRATOR
STATE
MANAGER
278
280
282
REPOSITORY
288
104
260
284
106

FIG. 9

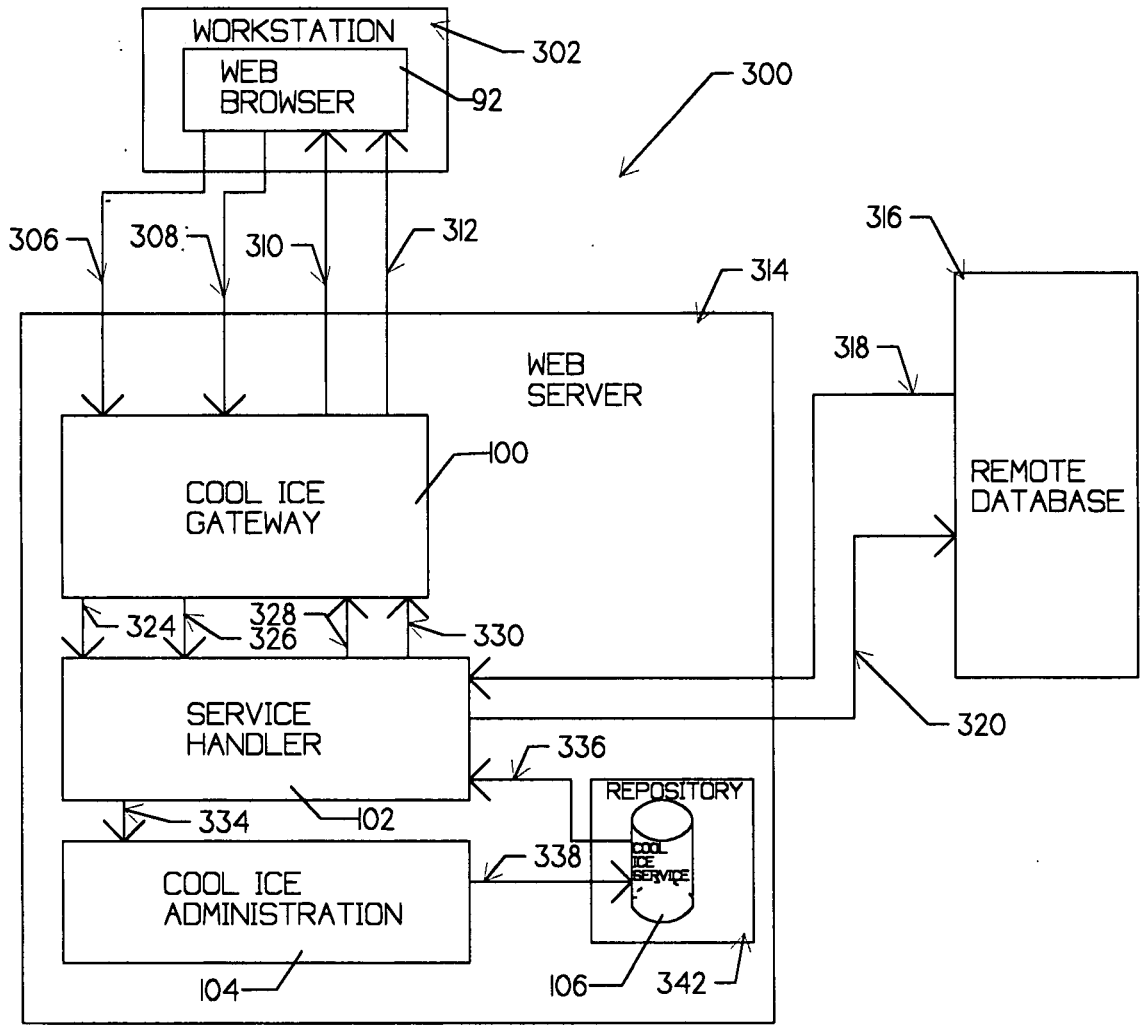
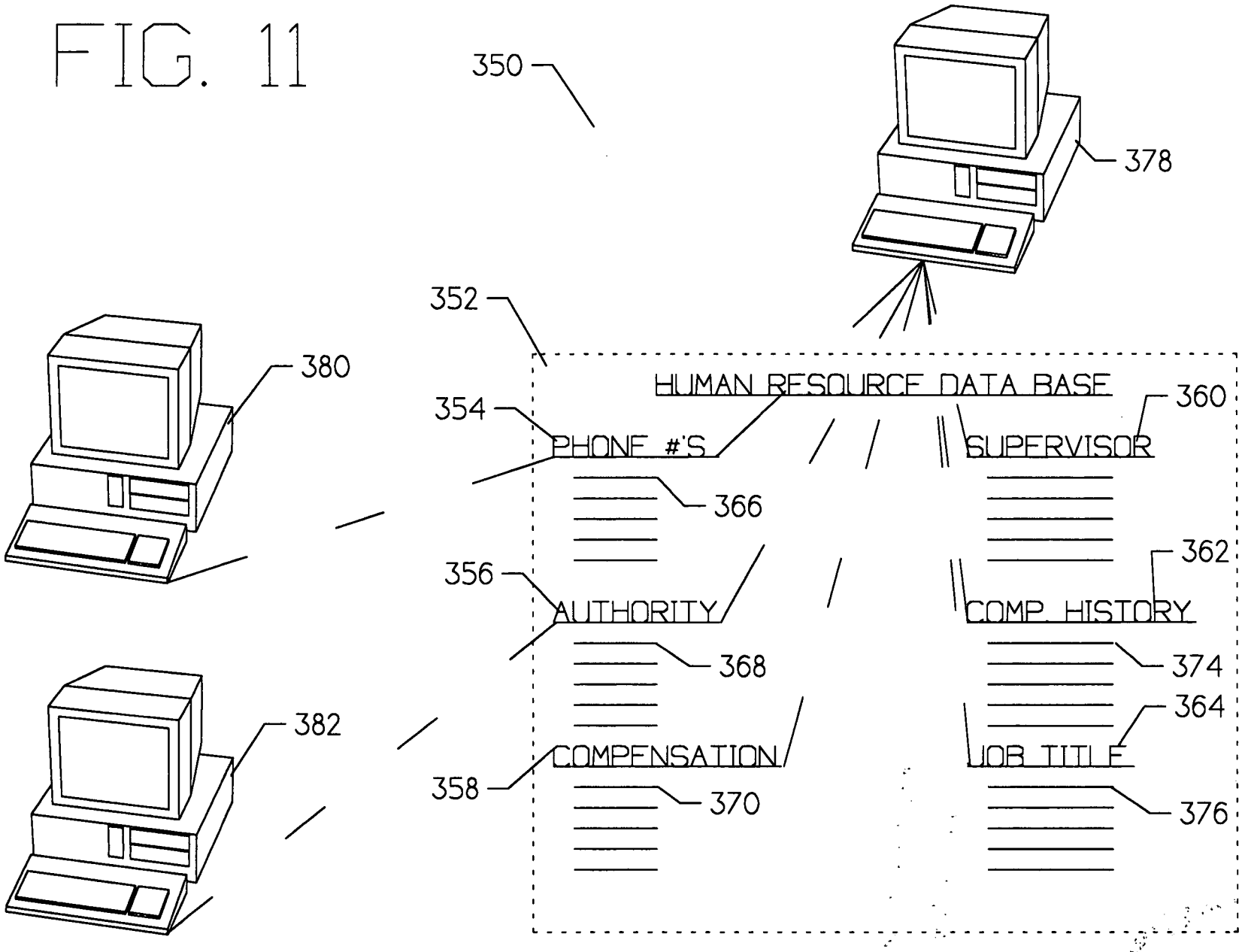

WORKSTATION
WEB BROWSER
92
302
300
306
308
310
312
314
316
318
WEB SERVER
COOL ICE GATEWAY
100
REMOTE DATABASE
324
328
326
330
SERVICE HANDLER
320
336
REPOSITORY
334
102
338
COOL ICE ADMINISTRATION
104
106
342

FIG. 10

FIG. 11


350
378
352
380
HUMAN RESOURCE DATA BASE
354
PHONE #'S
360
SUPERVISOR
366
362
356
AUTHORITY
COMP. HISTORY
368
374
364
382
COMPENSATION
JOB TITLE
358
370
376

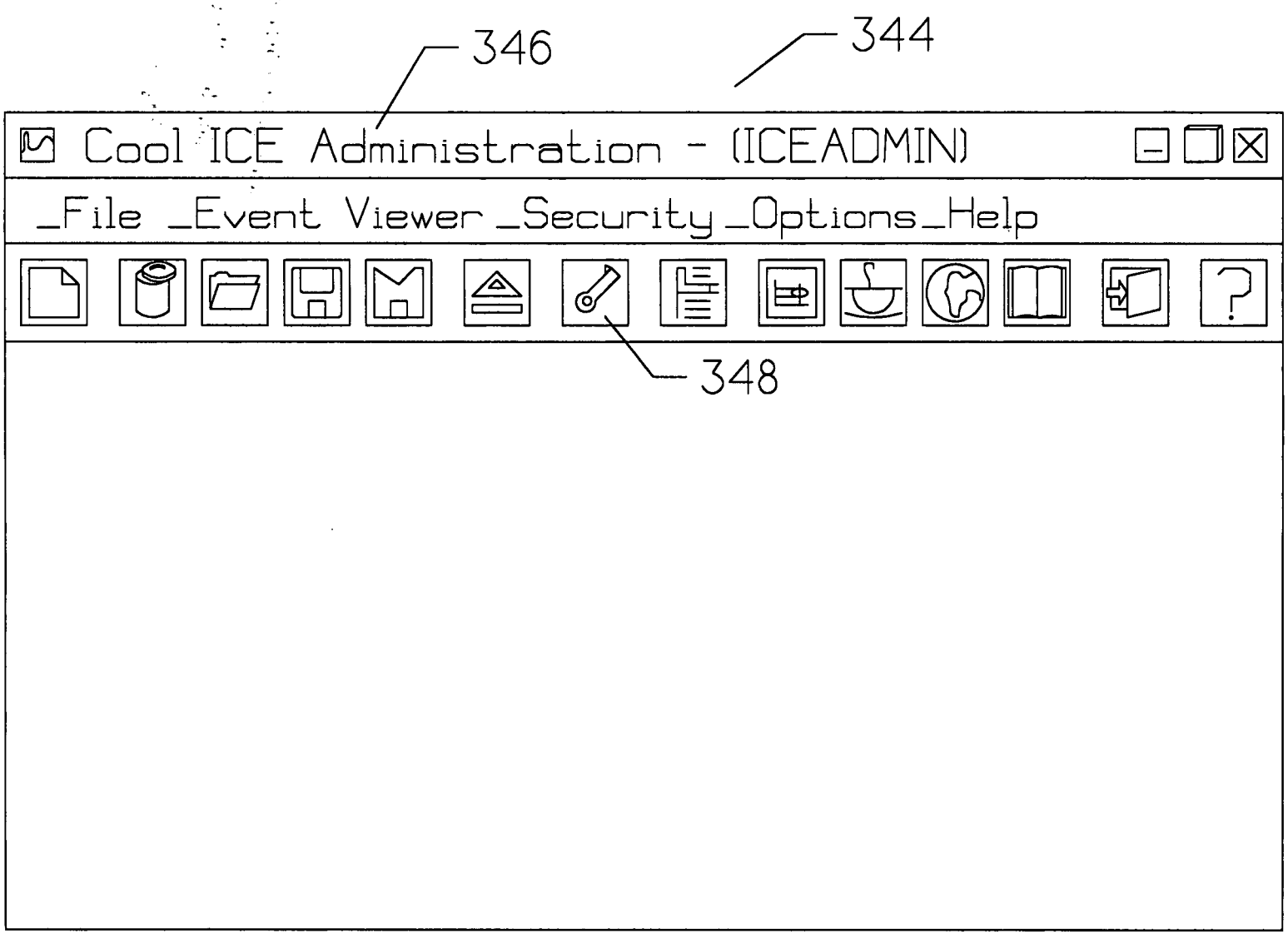

346
344
Cool ICE Administration - (ICEADMIN)
_File _Event Viewer _Security _Options _Help
348

FIG. 12

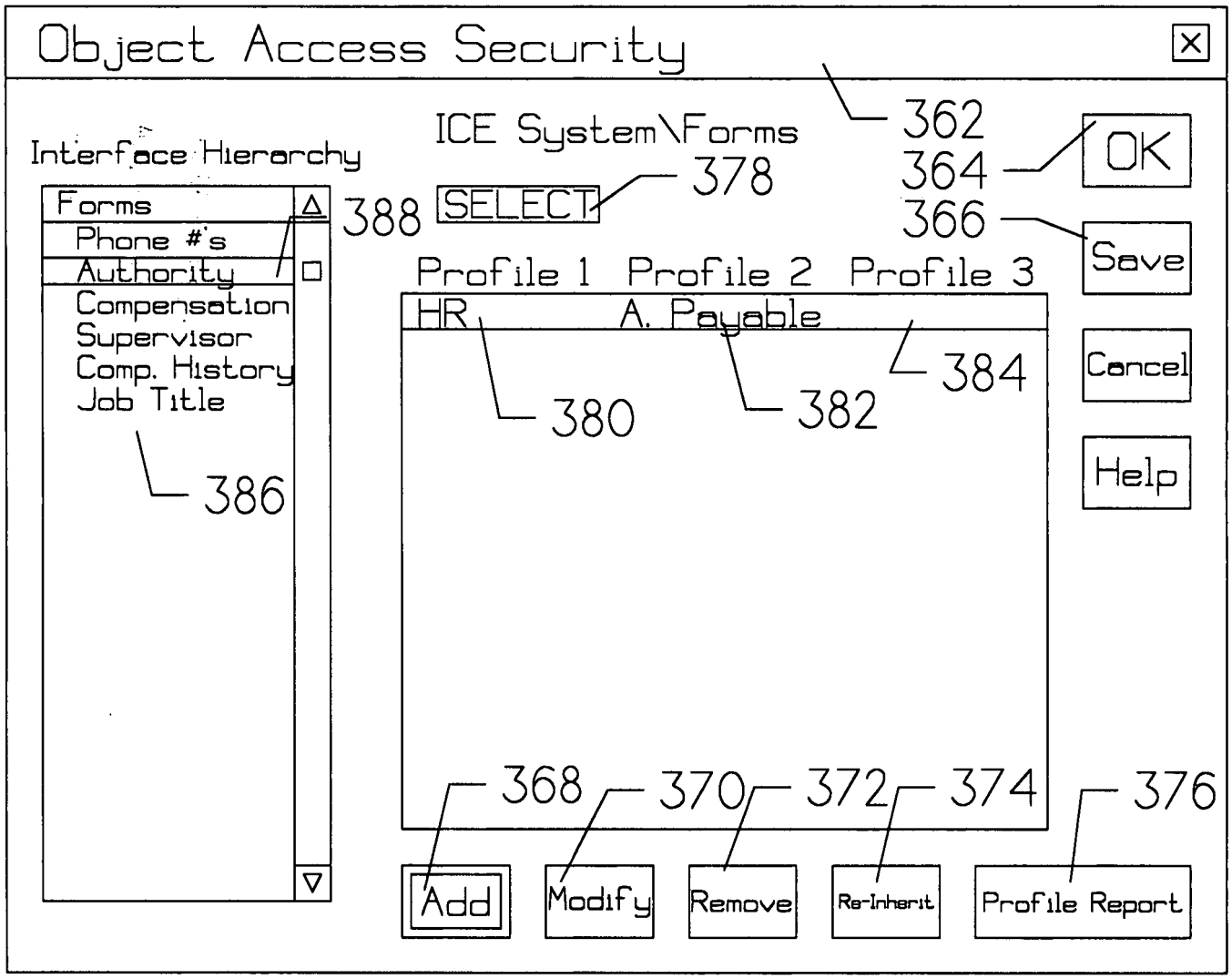

Object Access Security
ICE System\Forms
362
Interface Hierarchy
Forms
Phone #'s
Authority
Compensation
Supervisor
Comp. History
Job Title
386
388
SELECT
378
364
OK
366
Save
Profile 1
Profile 2
Profile 3
HR
A. Payable
380
382
384
Cancel
Help
368
370
372
374
376
Add
Modify
Remove
Re-Inherit
Profile Report
360

FIG. 13